



**8TH INTERNATIONAL SYMPOSIUM ON
THE PHYSICAL AND FAILURE
ANALYSIS OF INTEGRATED
CIRCUITS**



9-13 July 2001
The Westin Stamford & Westin Plaza
Singapore

Dear Exhibitor

IPFA 2001 EXHIBITION

We are pleased to invite you to participate in the IPFA 2001 Exhibition to be held from 11 – 13 July 2001 at the Raffles City Convention Centre, The Westin Stamford & Westin Plaza, Singapore.

The exhibition is held in conjunction with the 8th International Symposium on the Physical and Failure Analysis of Integrated Circuits (IPFA 2001). IPFA 2001 is organised by the IEEE Reliability/CPMT/ED Singapore Chapter in co-operation with the Centre for Integrated Circuit Failure Analysis and Reliability (CICFAR) of the National University of Singapore and Institute of Microelectronics. The Symposium is technically co-sponsored by the IEEE Electron Device Society.

The Symposium will be devoted to the fundamental understanding of the physical mechanisms of device failures and issues related to device reliability, especially those related to advanced process technologies.

Both the Symposium and the Exhibition are established events and are expected to draw over 400 participants from around the world who has specific interests in Integrated Circuit Reliability and Failure Analysis. As such, IPFA 2001 Exhibition will be an excellent opportunity for your company not only to reach out to the professionals in the field but also for your company to promote your equipment and other products to the Failure Analysis community in the electronics industries.

We are pleased to enclose the following for your information and perusal:

1. Exhibition Information
2. List of Exhibitors at the IPFA '99 Exhibition
3. Proposed Exhibition Layout Plan
4. Perspective View of Shell Scheme Booth
5. IPFA 2001 Call for Papers

Please book your exhibition space by 1 December 2000 with full payment to **IEEE IPFA 2001** to take advantage of the early bird discount of 10%. Please do not hesitate to contact us if you require more information.

Yours sincerely

Ong Soon Huat (Dr)
Exhibition Committee Chairman, IPFA 2001

Encl



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Singapore**

Exhibition Information

- The IPFA 2001 Exhibition will be held in the Olivia Room and Stamford Foyer - 4th Level, Raffles City Convention Centre, The Westin Stamford and Westin Plaza, Singapore. The symposium will be held at the adjoining Sophia Room. Tea breaks and luncheons will be held on the same floor.
- The dates of the exhibition are:

	<u>Exhibition</u>	<u>In Conjunction With:</u>
10 July 2001 (3.00pm-9.00pm)	Move In/Set up	Tutorial Sessions
11-13 July 2001	Exhibition	Symposium
13 July 2001 (2.30pm onwards)	Move out/Tear Down	Symposium
- The cost of a standard shell scheme booth (3m x 3m) for the exhibition period is S\$5,000 (Singapore Dollars: Five Thousand) including one free registration for the symposium from 10 -13 July 2001. There will be a 10% discount for early registration with full payment before 1 December 2000. A copy of the perspective view of a standard shell scheme booth is enclosed. The standard shell scheme booth comprises:
 - White aluminium system with 2.44 m height white partition panels
 - Fascia board with company's name and booth number in PVC sticker cut-out
 - 1 information desk
 - 2 folding chairs
 - 1 wastepaper basket
 - 2 fluorescent lights (40W)
 - 1 power point (13 Amps)
- Booths will be allocated on a first-come-first-served basis.

----- Reply Coupon -----

- [] Yes, I am pleased to confirm _____ booth(s) for the IPFA 2001 Exhibition. I hereby enclose a cheque No: _____ Amount: _____ as full payment for the confirmation.
- [] Yes, I would like to attend the IPFA 2001 Symposium. Please send me more information.

(Please type, print or attach your business card)

Company:		
Contact Person:	Designation:	
Tel:	Fax:	Email:
Address:		
Country:	Postal Code:	

For booking or further information, please contact:
Mrs Jasmine Leong
IPFA Secretariat
Kent Ridge Post Office
P O Box 1129
Singapore 911105
Tel: 743 2523 Fax: 746 1095 Email: ipfa@pacific.net.sg

List of Exhibitors

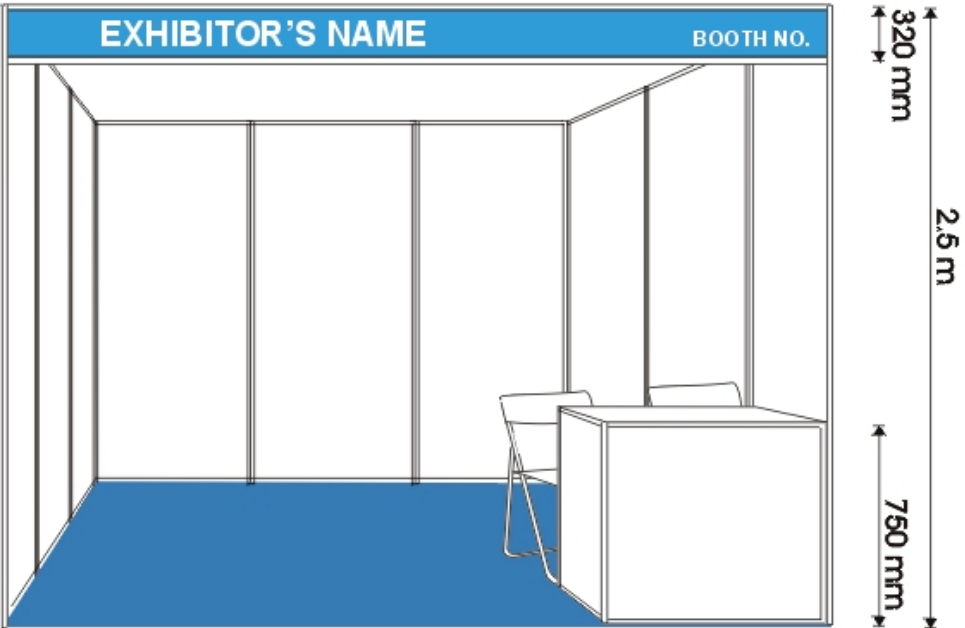
**7th INTERNATIONAL SYMPOSIUM ON THE PHYSICAL AND
FAILURE ANALYSIS OF INTEGRATED CIRCUITS
IPFA '99**

5 - 9 July 1999
Orchard Hotel, Singapore

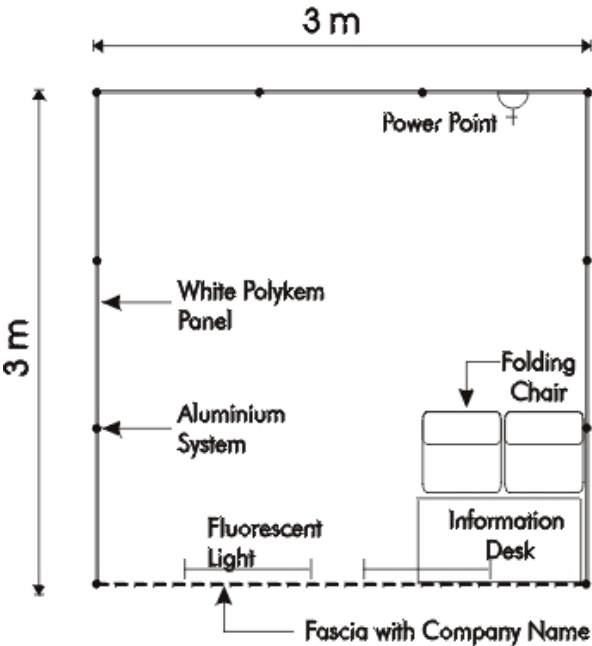
The following vendors exhibited at the IPFA '99 Exhibition:

Antech Instruments Pte Ltd
B&G International
BPS - Nextral
CAMECA
Carl Zeiss Pte Ltd
Destin
Destin N.V. - Zen Voce Technology Pte Ltd
EA Fischione
EDAX, USA
FEI/Philips Singapore
Hi-Tech Instruments Sdn Bhd
Image Transforms Pte Ltd
JEOL Asia Pte Ltd
Leica Microsystems (SEA) Pte Ltd
Leo Electron Microscopy Ltd
Leo Electron Microscopy Pte Ltd
Leo Elektronenmikroskopie GmbH
Marubeni International Electronics Corp
Micrion Corporation
Nippon Scientific Co Ltd
Semicaps Pte Ltd
Sonix Inc
Sonoscan, Inc

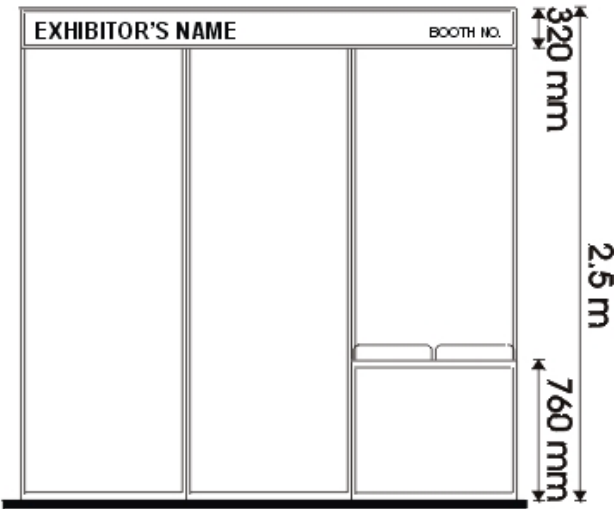
Standard 3m x 3m Shell Scheme Booth



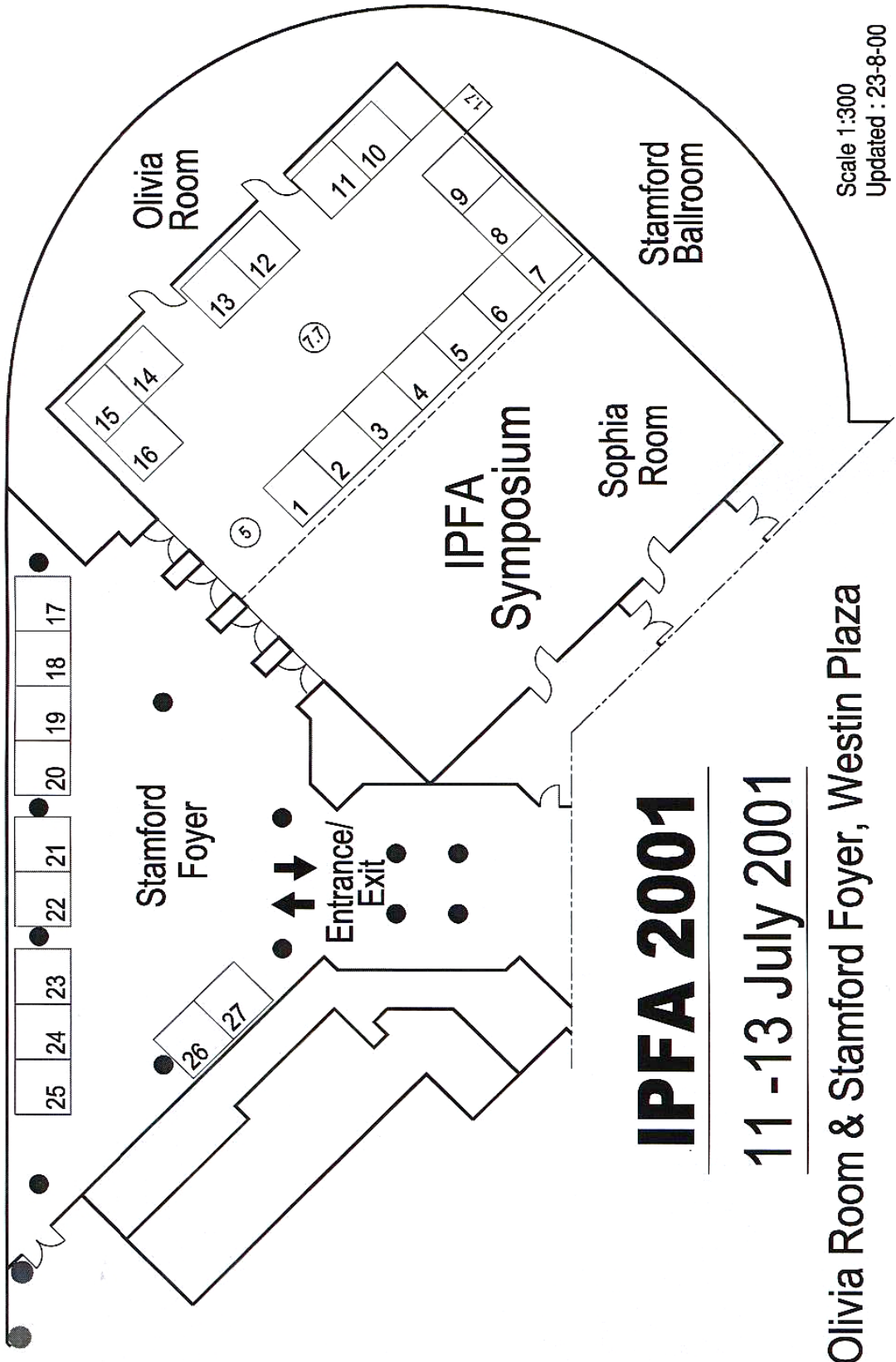
Perspective View



Layout Plan



Front elevation



IPFA 2001

11 -13 July 2001

Olivia Room & Stamford Foyer, Westin Plaza

Scale 1:300
Updated : 23-8-00

FINAL CALL FOR PAPERS

**8th INTERNATIONAL
SYMPOSIUM ON THE PHYSICAL
AND FAILURE ANALYSIS OF
INTEGRATED CIRCUITS**

IPFA 2001

**9 - 13 July 2001
The Westin Stamford & Westin Plaza,
Raffles City Convention Centre
Singapore**

**Organised by:
IEEE Reliability/CPMT/ED
Singapore Chapter**



IEEE

**Co-sponsored by:
IEEE Electron Device Society**



**In Cooperation with:
Centre for Integrated Circuit Failure Analysis and
Reliability (CICFAR) - NUS
Institute of Microelectronics, Singapore**

ORGANISING COMMITTEE

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- Spencer CHEW, *Agilent Technologies*
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- YC NG, *NPoint Inc*
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- S LIM, *Systems on Silicon Mfg Co*
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Committee Members - Philip HO, *Lucent Technologies*
- Rajesh MEHTA, *TECH semiconductor*
- Jacob PHANG, *NUS*
- YK SWEE, *UTAC*

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IPFA Secretariat

Jasmine LEONG
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**IPFA Secretariat
Kent Ridge Post Office
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**PLEASE
AFFIX
POSTAGE
STAMP**

IPFA 2001 is organised by the IEEE Reliability/CPMT/ED Singapore Chapter in co-operation with the Centre for Integrated Circuit Failure Analysis and Reliability (CICFAR), NUS and the Institute of Microelectronics (IME). The Symposium is technically co-sponsored by the IEEE Electron Device Society.

The Symposium will be devoted to the fundamental understanding of the physical mechanisms of device failures and issues related to device reliability, especially those related to advanced process technologies.

A three-day exhibition of FA equipment and services will be held concurrently with the Symposium.

SUBMISSION OF PAPERS

Authors are requested to submit electronically a two-page summary (inclusive of a 50-word abstract, figures & references) in Adobe Acrobat PDF format file to the Technical Program Chairman (c/o IPFA 2001 Secretariat at ipfa@pacific.net.sg) by 1 December 2000. Kindly refer to our website for guidelines in submitting your abstract:<http://www.ewh.ieee.org/reg/10/ipfa/submission.html>. The summary should state clearly and concisely the specific results of the work, why the results are important and how the results relate to previously reported work. Your work must be original and previously unpublished. Your submission should contain the name, affiliation and address of each author, and the telephone number, fax number and email address of the corresponding author. The category of submission from the listed areas should also be stated clearly in your submission. Please note that all submissions must be in English.

IPFA Secretariat
Jasmine Leong
Kent Ridge Post Office, P. O. Box 1129
Singapore 911105
Tel: (65) 743 2523, Fax: (65) 746 1095
Email: ipfa@pacific.net.sg

IMPORTANT DATES

- 1 December 2000 - Submission of Summary and Abstract**
- 15 February 2001 - Notification of Paper Acceptance**
- 15 April 2001 - Submission of Camera-ready Manuscript**

For further information about the Symposium and Technical Programme, please contact:

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 Micron Semiconductor Asia Pte Ltd
 990 Bendemeer Road, Singapore 339942.
 Tel: (65) 290 3101, Fax: (65) 290 3425
 Email: wilsontan@micron.com

Spencer CHEW
 Agilent Technologies (S) Pte Ltd
 2 Corporation Road, #05-01 Corporation Place,
 Singapore 618494.
 Tel: (65) 215 4706, Fax: (65) 268 4842
 Email: spencer-yc_chew@agilent.com

TECHNICAL PROGRAMME

The Symposium will focus on the areas listed below with contributed and invited papers and Tutorials. The Technical Program Committee is inviting paper submission on original research work in the following or related areas.

Advanced Failure Analysis Techniques

- Physical, chemical and electrical analysis techniques for fault isolation and failure identification
- Novel techniques including optical beam, electron beam, ion beam and scanning probe techniques

Dielectrics and Hot-Carrier Reliability

- Time dependent dielectric breakdown
- Oxide degradation mechanisms and modelling
- Plasma induced damages - characterization techniques, mechanisms and modelling
- Tunnel oxides in non-volatile memories
- Hot-carrier effects - measurement techniques and modelling

EOS/ESD and CMOS Latchup

- Effects of ESD on specific devices and new protection structures
- Latent damages and damage interpretation
- ESD modelling and measurement techniques
- CMOS latchup characterization and modelling

Packaging and Metallization Related Failure Mechanisms

- Electromigration studies and modelling
- Contact degradation and related issues
- MCM, BGA, CSP, Flip-chip and other advanced packaging related failure mechanisms
- Package stress modelling and characterization
- Fine pitch wire bonding and solder joint reliability

Practical Issues in Building-in-Reliability

- Reliability engineering emphasizing design and process aspects
- Process control in wafer processing and reliability
- Assembly related issues in device reliability

Reliability and Failure Analysis in Specialist Devices

- Power semiconductor devices
- Optoelectronic devices
- Compound semiconductors
- Micro Electro-Mechanical Systems

TUTORIALS

Four half-day tutorials will be held in conjunction with the Symposium. The tutorials will deal with areas on failure analysis techniques and device reliability issues.

8th International Symposium on the Physical and Failure Analysis of Integrated Circuits

IPFA 2001

**The Westin Stamford & Westin Plaza,
 Raffles City Convention Centre
 Singapore
 9 - 13 July 2001**

(Please use typewriter or write in block capitals)

Name: (Prof./Dr./Mr./Mrs./Ms.)

.....

Organisation:

Address:

.....

Postal Code: **City:**

Country:

Tel: **Fax:**

Email Address:

- [] I intend to attend the Symposium
- [] I intend to submit a paper to IPFA2001 before 1 Dec 2001
- [] I need further information

Title of paper:

.....

.....

Send this Call for Papers also to:

.....

Address:

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